

SERVO SELF-WRITE DISK DRIVE WITH DUAL-STAGE ACUTATOR

ABSTRACT OF THE DISCLOSURE

A hard disk drive (HDD) uses a technique for setting the initial servo track pitch for a servo system by using a secondary actuator, such as a microactuator or a milliactuator. The actuator of the HDD is positioned against a crash stop and a burst pattern is written on a hard disk while the read/write head is in a first position. A bias voltage of the secondary actuator is incrementally changed to change the position of the read/write head and a burst pattern is written for each change. The overlap is determined as a sum of the averaged amplitudes of the burst patterns that are adjacent to a selected burst pattern divided by the averaged amplitude of the selected burst pattern. The process is terminated when the determined overlap for each selected burst pattern is within a selected criterion of a target overlap value.

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